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		1	U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2(if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	001	US6141388	10-31-2000	Servais et al.	
	002	US6144711	11-07-2000	Raleigh et al.	
	003	US6292917	09-18-2001	Sinha et al.	
	004	US6298092	10-02-2001	Heath, Jr et al.	
	005	US6532225	03-11-2003	Chang; Li Fung et al.	
	006	US6594473	07-15-2003	Dabak et al.	
	007	US6636568	10-21-2003	Kadous; Tamer et al.	
	008	US6654613	11-25-2003	Maeng et al.	
	009	US6693992	02-17-2004	Jones et al.	
	010	US6760313	07-06-2004	Sindhushayana et al.	
	011	US6760882	07-06-2004	Gesbert et al.	
	012	US6801790	10-05-2004	Rudrapatna et al.	
	013	US6847828	01-25-2005	Miyoshi et al.	
	014	US6888899	05-03-2005	Raleigh et al.	
	015	US6920192	07-19-2005	Laroia et al.	
	016	US6950632	09-27-2005	Yun et al.	
	017	US6952426	10-04-2005	Wu et al.	
	018	US6956906	10-18-2005	Tager et al.	
	019	US6996380	02-07-2006	Dent et al.	
	020	US7020110	03-28-2006	Walton; Jay Rod et al.	
	021	US7020490	03-28-2006	Khatri et al.	

EXAMINER SIGNATURE DATE CONSIDERED

"EXAMINE In initial infederance considered, whether or not clastion is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered include copy of this form with met communication to applicant. Applicant is unique clastion designation number (optional), a Sea Kinds Codes of USPTO Patent Documents at twee uspits gov or MPEP 901.04. a Enter Office that issued the document, by the two-letter code (MIPO Standard ST 3), a For Japanese patent document, be indicated on the document with the preport must procedule the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 161 jossible. Applicant is to place a check mark here if English language Translation is required to obtain or retain a beginning to the procedure of t

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U.S. PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2(if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
	022	US7035359	04-25-2006	Molnar et al.					
	023	US7103325	09-05-2006	Jia et al.					
	024	US7116652	10-03-2006	Lozano et al.					
	025	US7120199	10-10-2006	Thielecke et al.					
	026	US7133459	11-07-2006	Onggosanusi et al.					
	027	US7149239	12-12-2006	Hudson et al.					
	028	US7158563	01-02-2007	Ginis et al.					
	029	US7242727	07-10-2007	Liu et al.					
	030	US7248841	07-24-2007	Agee; Brian G. et al.					
	031	US7260153	08-21-2007	Nissani (Nissensohn) et al.					
	032	US7260366	08-21-2007	Lee et al.					
	033	US7283508	10-16-2007	Choi et al.					
	034	US7308035	12-11-2007	Rouquette et al.					
	035	US7327800	02-05-2008	Oprea et al.					
	036	US7392014	06-24-2008	Baker; Matthew P. J. et al.					
	037	US7551580	06-23-2009	du Crest et al.					
	038	US7573805	08-11-2009	Zhuang et al.					
	039	US20020126803	09-12-2002	Jones, William W et al.					
	040	US20020132600	09-19-2002	Rudrapatna, Ashok N et al.					
	041	US20020163879	11-07-2002	Li, Xiaodong et al.					
	042	US20030043887	03-06-2003	Hudson, John E et al.					

EXAMINER SIGNATURE DATE CONSIDERED

"EXAMINE In initial infederance considered, whether or not clastion is in conformance with MPEP 609. Draw line through citation if not in conformance and not crusided include copy of this form with met communication to applicant. Negligiant is unique calcition designation number (optional), a Sea Kinds Codes of USPTO Patent Documents at twee uspits gov or MPEP 901.04. a Enter Office that issued the document, by the two-letter code (MPO Standard ST 3), a For Japanese patent document, be indicated on the document with the preport must procedule the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under MPIO Standard ST 1.61 (possible, Applicant is to place a check mark here it English language Translation is required to obtain or retain a beginning of the procedure of

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			U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2(if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	043	US20030060173	03-27-2003	Lee, Yong-Suk et al.	
	044	US20030076797	04-24-2003	Lozano, Angel et al.	
	045	US20030086514	05-08-2003	Ginis, Georgios et al.	
	046	US20030092456	05-15-2003	Dent, Paul Wilkinson et al.	
	047	US20030112745	06-19-2003	Zhuang, Xiangyang et al.	
	048	US20030123381	07-03-2003	Zhuang, Xiangyang et al.	
	049	US20030123389	07-03-2003	Russell, Patrick Gene et al.	
	050	US20030128658	07-10-2003	Walton, Jay Rod; et al.	
	051	US20030139196	07-24-2003	Medvedev, Irina et al.	
	052	US20030153320	08-14-2003	Noerpel, Anthony et al.	
	053	US20030161282	08-28-2003	Medvedev, Irina et al.	
	054	US20030235147	12-25-2003	Walton, Jay R et al.	
	055	US20040042439	03-04-2004	Menon, Murali Paravath et al.	
	056	US20040047292	03-11-2004	Du Crest, Gilles et al.	

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent	Publication	Name of Patentee or Applicant of	Pages, Columns,				
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EXAMINER SIGNATURE DATE CONSIDERED

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Sheet	4	of	6	Attorney Docket No: 0	30412			

		Country Code ³⁻ Number ⁴⁻ Kind Code ⁵ (if known)	MM-DD-YYYY		Relevant Passages or Relevant Figures Appear	T 6
	057	WO01080510	10-25-2001	AWARE INC [US]		
	058	EP0991221A2	04-05-2000	LUCENT TECHNOLOGIES INC [US]		
	059	EP1185001A2	03-06-2002	NORTEL NETWORKS LTD [CA]		
	060	EP1207645A1	05-22-2002	LUCENT TECHNOLOGIES INC [US]		
	061	EP1223702A1	07-17-2002	LUCENT TECHNOLOGIES INC [US]		
	062	EP1241824A1	09-18-2002	ERICSSON TELEFON AB L M [SE]		
	063	JP11069431A	03-09-1999	MITSUBISHI ELECTRIC CORP		
	064	JP11163823A	06-18-1999	VICTOR COMPANY OF JAPAN		0
	065	JP2001044930A	02-16-2001	MATSUSHITA ELECTRIC IND CO LTD		0
	066	RU2158479C2	10-27-2000	AL KATEL N V [NL]		_
	067	WO0182521A2	11-01-2001	QUALCOMM INC [US]		
	068	WO02062002A1	08-08-2002	QUALCOMM INC [US]		
	069	WO02073869A1	09-19-2002	ERICSSON TELEFON AB L M [SE] et al.		
				RATURE DOCUMENTS		
Examiner Initials*	Cite No.	of the item (book, r	nagazine, journal,	AL LETTERS), title of the article (when serial, symposium, catalog, etc.), date her, city and/or country where publis	e, page(s), volume-	T2
	070	LI LIHUA, et al., "A	Practical Space-I	requency Block Coded OFDM Sch EEE International Symposium on Pe	eme for Fast	

EXAMINER SIGNATURE DATE CONSIDERED

vol. 1, XP002280831.

October 1993, rages 357-364.

071

Mobile Radio Communications, PIMRC 2002, 15-18, September, 2002, pages 212-216.

M.A. KOUSA, et al., "Multichannel adaptive system," IEE Proceedings-I, Vol. 140, No. 5,

*EXAMMED Initial Indexense considered, whether or not classins in conformance with MFDE 909. Draw line through classion in an incoformance and not considered inclined copy of this form with thest communication to applicant. Applicant is unique callous designation tumber (optional). See Kinds Codes 0USFID Patent Documents at www.upto.gov or MFDE 901.04. Enter Office that issued the document, by the violence code (WIPP 001 As a price part of the patent document. With of document to by the appropriate period counsent, see indication of the year of the reign of the Emperor must precede the serial number of the patent document (WIPD Standard ST 1.61 (possible - Applicant is to place a check mark here if English language Translation is attained in character of information is required to obtain or retain a being the public which is to file (and by the USFI C) to process) an application. Certificrhighty is governed by 35 CR 1.22 and 37 CFH 1.14. This collection is estimated to take 2 hours to complete, including general part of the patent of the USFI C). The will have depended upper on the USFI C in the USFI C in the patent of the USFI C in the USFI C in

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			FOREIGN PATE	NT DOCUMENTS		
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	072	Multilevel Transmis Electronics, Inform	sion Power Contro ation and Commur	arrier Adaptive Demodulation Syst of for OFDM/FDD System," The Ins nications Engineers general meetin mmunication 1, page 400.	titute of	

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